



Commercial Harbor Craft Proposed Regulation Workshop

**Sacramento
June 28, 2006**

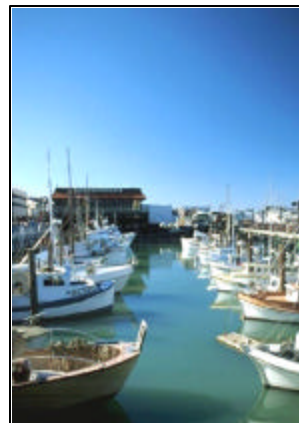


California Environmental Protection Agency

Air Resources Board

Overview

- ◆ Background
- ◆ Proposed Regulatory Concepts
- ◆ Next Steps



Background



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Goals

- ◆ Develop a statewide control measure to address emissions from commercial harbor craft
- ◆ Diesel Risk Reduction Plan
- ◆ Meet goals of the Goods Movement Plan

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Emission Reduction Plan for Ports and Goods Movement

- ♦ Cleaning up Existing Harbor Craft and U.S. EPA or ARB Cleaner Engine Standards

Percent Control		
2010	2015	2020
25%	30%	40%

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Proposed Regulatory Concepts



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Applicability

- ♦ Ferries
- ♦ Tug and Tow Boats
- ♦ Work, Crew, and Pilot Boats
- ♦ Fishing Boats

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Proposed Regulatory Overview

- ♦ Separation between Fishing and Non-fishing harbor craft
 - Different requirements
 - Different compliance dates

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Fishing Fleets

- ♦ Fishing
 - Commercial Fishing
 - Commercial Passenger Fishing
- ♦ Approach designed to maintain level of Moyer availability

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Fishing Fleets Standard

Existing Engine



**Retrofit with Level 1
(or Equivalent Performance
Based Standard)**

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Fishing Fleet Compliance

- ◆ Oldest – Highest Use Engines First
- ◆ Starting 2008
- ◆ Complete 2013

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Non-Fishing Fleet Vessel Types

- ◆ Ferries
- ◆ Tug and Tow
- ◆ Crew
- ◆ Work
- ◆ Pilot
- ◆ Other Vessels

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Non-Fishing Fleets Phase 1

Tier 0 or Tier 1 Engine



Or



**Install Highest
Level VDECS**

**Install
Tier II
Engine**

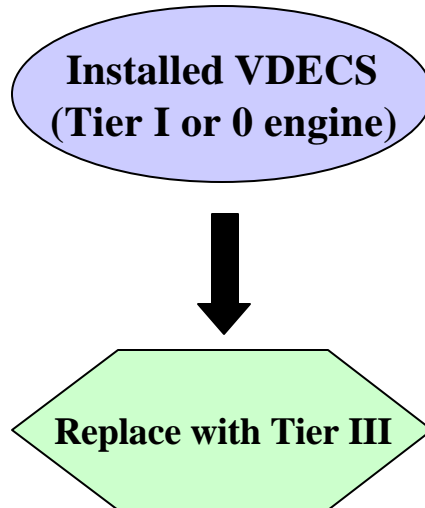
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Non - Fishing Fleet Compliance Phase 1

- ◆ Starting 2008
- ◆ Complete 2013

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Non-Fishing Fleets Phase 2a



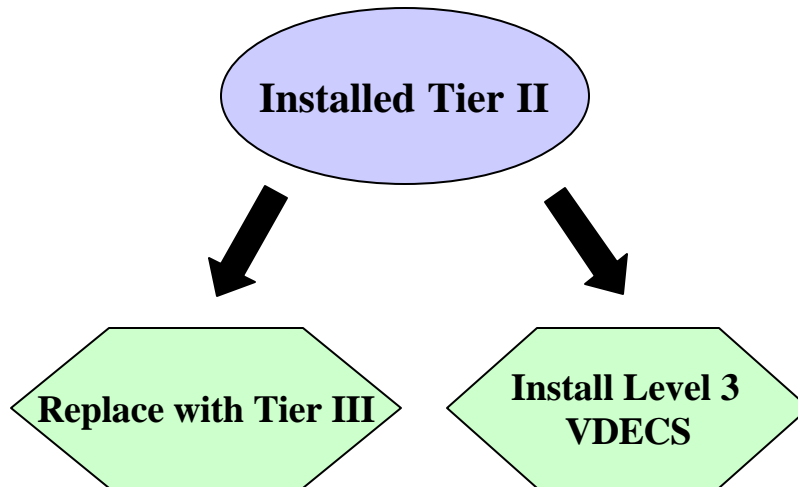
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Non - Fishing Fleet Compliance Phase 2a

- ♦ Starting 2013
- ♦ Complete 2018

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Non-Fishing Fleets Phase 2b



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Non - Fishing Fleet Compliance Phase 2b

- ◆ Starting 2016
- ◆ Complete 2021

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Verified Diesel Emission Control Strategies

- ♦ If no VDECS available
 - Compliance Extension
 - Up to two years

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Record Keeping Requirements

- ♦ Annual Record Keeping
 - Keep on vessel

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Reporting Requirements

- ◆ Compliance Plan
- ◆ Demonstration of Compliance
- ◆ Annual Reporting

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Preliminary Fishing Emission Inventory (tpy)

	Baseline	After Implementation	% Reduction
PM	448	336	25%
NOx	11,192	11,192	0

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Preliminary Non - Fishing Emission Inventory (tpy)

	Baseline	After Implementation	% Reduction
PM	977	93	91%
NOx	25,712	13,691	47%

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Next Steps



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Next Steps

- ◆ Next workshop July 27, 2006
- ◆ Workshop End Aug./Early Sept.
- ◆ Release Initial Statement of Reasons
- ◆ Board Date November

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